

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-21 (Canceled)

22. (Previously Presented) A thermally conductive interface material comprising:

a thermally conductive paste comprising porous agglomerates of carbon black dispersed in a paste-forming vehicle, wherein the paste, when compressed between a heat source and a heat sink, forms a thermally conductive interface material.

23-110 (Canceled)

111. (Previously Presented) The thermally conductive interface material of claim 22, wherein the paste-forming vehicle is a paste-forming vehicle system comprising a solvent and a solute.

112. (Previously Presented) The thermally conductive interface material of claim 111, wherein the solvent is selected from the group consisting of an organic solvent, silicates, glycol ethers, methoxypolyethylene glycol ("MPEG"), ethylene glycol, propylene glycol, ethylene oxide, propylene oxide, polyethylene glycol ("PEG"), PEG modified with various types of functional groups at the ends of a macromolecular chain, oil, water, alcohols, diethyl sulfate, diisobutyl carbinol, diisobutyl ketone, hexylene glycol, isobutyl acetate, isophorone, isopropyl acetate, methyl isobutyl carbinol, ketone, *n*-butyl acetate, *n*-propyl acetate, primary amyl acetate mixed isomers, primary amyl alcohol mixed isomers, *n*-propyl propionate, *n*-butyl propionate, *n*-pentyl propionate, methylene chloride, perchloroethylene, trichloroethylene, xylene, acetone, ethyl acetate, and chemically related substances.

113. (Currently Amended) The thermally conductive interface material of claim 111, wherein the solute is selected from the group consisting of cellulosic resin, ~~thermoplastic resin~~, glycidyl methacrylate, hydroxy(meth)acrylate monomers, epsilon-caprolactone monomer, hydroxypropyl acrylate, hydroxyethyl acrylate, ethylene acrylic acid, divinylbenzene, styrene-butadiene latexes, acrylic latexes, vinyl acrylic latexes, styrene

acrylic latexes, vinyl versatate latexes, vinyl chloride, vinylbenzyl chloride, chloromethylstyrene, vinyl acetate copolymers, epoxy resins, epoxy acrylate, aminoethylethanolamine, glycol ethers, propylene glycols, ethylene glycols, polyols, ethylene acrylic acid resins, methylcellulose, ethyl cellulose, hydroxyethyl cellulose, polyvinyl alcohol, starch, and chemically related substances.

114. (Previously Presented) The thermally conductive interface material of claim 111, wherein the solvent comprises polyethylene glycol and the solute comprises ethyl cellulose.

115. (Previously Presented) The thermally conductive interface material of claim 114, wherein the ethyl cellulose is present in the paste in amount of about 3 to about 5 vol.%.

116. (Previously Presented) The thermally conductive interface material of claim 114, wherein the ethyl cellulose is present in the paste in an amount of about 3 vol.%.

117. (Previously Presented) The thermally conductive interface material of claim 114, wherein the carbon black is present in the paste in an amount of less than about 2 vol.%.

118. (Previously Presented) The thermally conductive interface material of claim 114, wherein the carbon black is present in the paste in an amount of less than about 1.50 vol.%.

119. (Previously Presented) The thermally conductive interface material of claim 114, wherein the carbon black is present in the paste in an amount of about 1.25 vol.%.

120. (Previously Presented) The thermally conductive interface material of claim 111, wherein the solvent is di(ethylene glycol) butyl ether and the solute is ethyl cellulose.

121. (Previously Presented) The thermally conductive interface material of claim 120, wherein the ethyl cellulose is present in the paste in an amount of about 40 vol.%.

122. (Previously Presented) The thermally conductive interface material of claim 120, wherein the carbon black is present in the paste in an amount of less than about 0.40 vol.%.

123. (Previously Presented) The thermally conductive interface material of claim 120, wherein the carbon black is present in the paste in an amount of about 0.20 vol.%.

124. (Previously Presented) The thermally conductive interface material of claim 22, wherein the interface material has a thermal contact conductance of about 1.8×10^5 W/m²·°C to about 3.0×10^5 W/m²·°C.